

Track: SOPS Data Analysis

Session: Special Data Analysis Topics: Use of SOPS,
Negatively Worded Items, and Trending

Date & Time: April 21, 2010, 8:00 am

Track Number: SOPS T4-S1

Patient Safety Culture Change Over Time

SOPS Results From Trending Hospitals

Theresa Famolaro, MPS
Westat



HSOPS Patient Safety Culture Dimensions

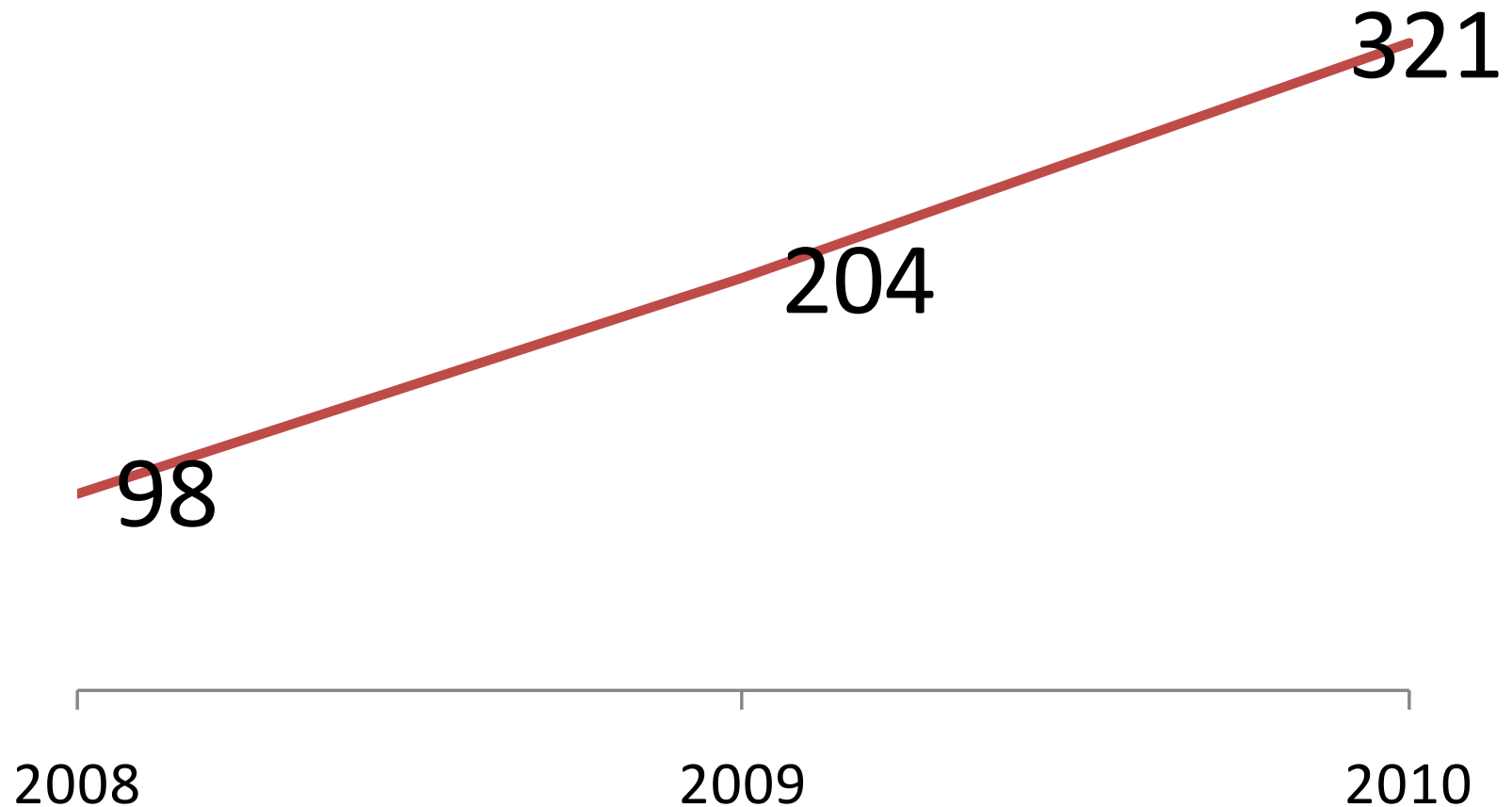
- 42 items assess 12 dimensions of patient safety culture
 - 1. Communication openness
 - 2. Feedback & communication about error
 - 3. Frequency of event reporting
 - 4. Handoffs & transitions
 - 5. Management support for patient safety
 - 6. Nonpunitive response to error
 - 7. Organizational learning--continuous improvement
 - 8. Overall perceptions of patient safety
 - 9. Staffing
 - 10. Supv/mgr expectations & actions promoting patient safety
 - 11. Teamwork across units
 - 12. Teamwork within units
- Patient safety “grade” (Excellent to Poor)
- Number of events reported in past 12 months

Definition of a HSOPS Trending Hospital

- A hospital that submitted data at least twice between 2007-2010
- Trending analysis compares results from hospitals' previous submission to its most recent



Number of Trending Hospitals 2008-2010



2010 Hospital Survey (HSOPS) Trending Hospitals

Summary Statistics for the Most Recent and Previous Survey Administrations - 321 Trending Hospitals

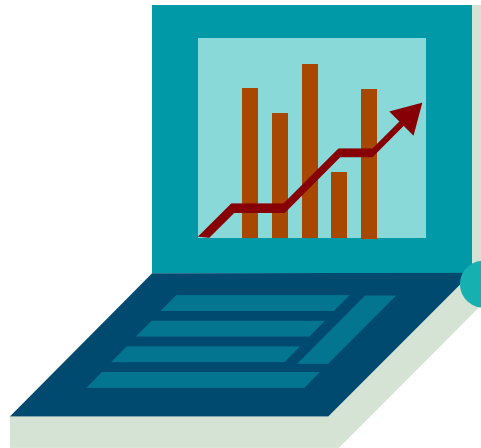
Summary Statistic	Most Recent Survey Administration	Previous Survey Administration
Total number of respondents	127,953	114,497
Number of completed surveys per hospital	Average: 399 Range: 14–3,710	Average: 357 Range: 11–3,908
Hospital response rate	Average: 56% Range: 6–100%	Average: 49% Range: 4–100%
Number of hospitals (out of 321) that administered the survey to all staff, or a sample of all staff, from all departments	252 (79%)	261 (81%)

2010 Hospital Survey (HSOPS) Trending Hospitals

- Average time between previous and most recent survey administrations
 - 19 months (range: 6 to 46 months).
- Average change in response rate: 7%
- Distribution of trending hospitals similar to AHA
 - by bed size, teaching status, and ownership

Meaningful Change in Scores Over Time

- 5 percentage point difference is used as a rule of thumb to identify meaningful changes in scores over time.



2010 Overall Trending Results (N = 321)

Patient Safety Culture Area	Average % Positive		Difference
	Most Recent	Previous	
1. Teamwork Within Units	80%	78%	+2
2. Supervisor/Manager Expectations & Actions Promoting Patient Safety	75%	74%	+1
3. Management Support for Patient Safety	72%	69%	+3
4. Organizational Learning-Continuous Improvement	72%	70%	+2
5. Overall Perceptions of Patient Safety	65%	62%	+3
6. Feedback & Communication About Error	64%	61%	+3
7. Communication Openness	62%	61%	+1
8. Frequency of Events Reported	63%	60%	+3
9. Teamwork Across Units	58%	56%	+2
10. Staffing	56%	53%	+3
11. Handoffs & Transitions	45%	44%	+1
12. Nonpunitive Response to Error	45%	43%	+2

2010 Overall Item Trending Results (N = 321)

Patient Safety Culture Area and Items	Overall % Positive		Difference
	Most Recent	Previous	
Frequency of Events Reported			
1. When a mistake is made, but is <u>caught and corrected before affecting the patient</u> , how often is this reported?	56	52	+4
2. When a mistake is made, but has <u>no potential to harm the patient</u> , how often is this reported?	59	55	+4
Overall Perceptions of Patient Safety			
1. We have patient safety problems in this unit.	64	60	+4
Staffing			
1. We have enough staff to handle the workload.	56	52	+4

Hospital Average Increases and Decreases

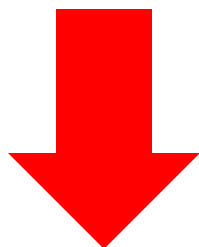
Hospitals that Increased – change in scores



Composites – Average Increases 5-7 %

Items – Average Increases 6-10%

Hospitals that Decreased – change in scores

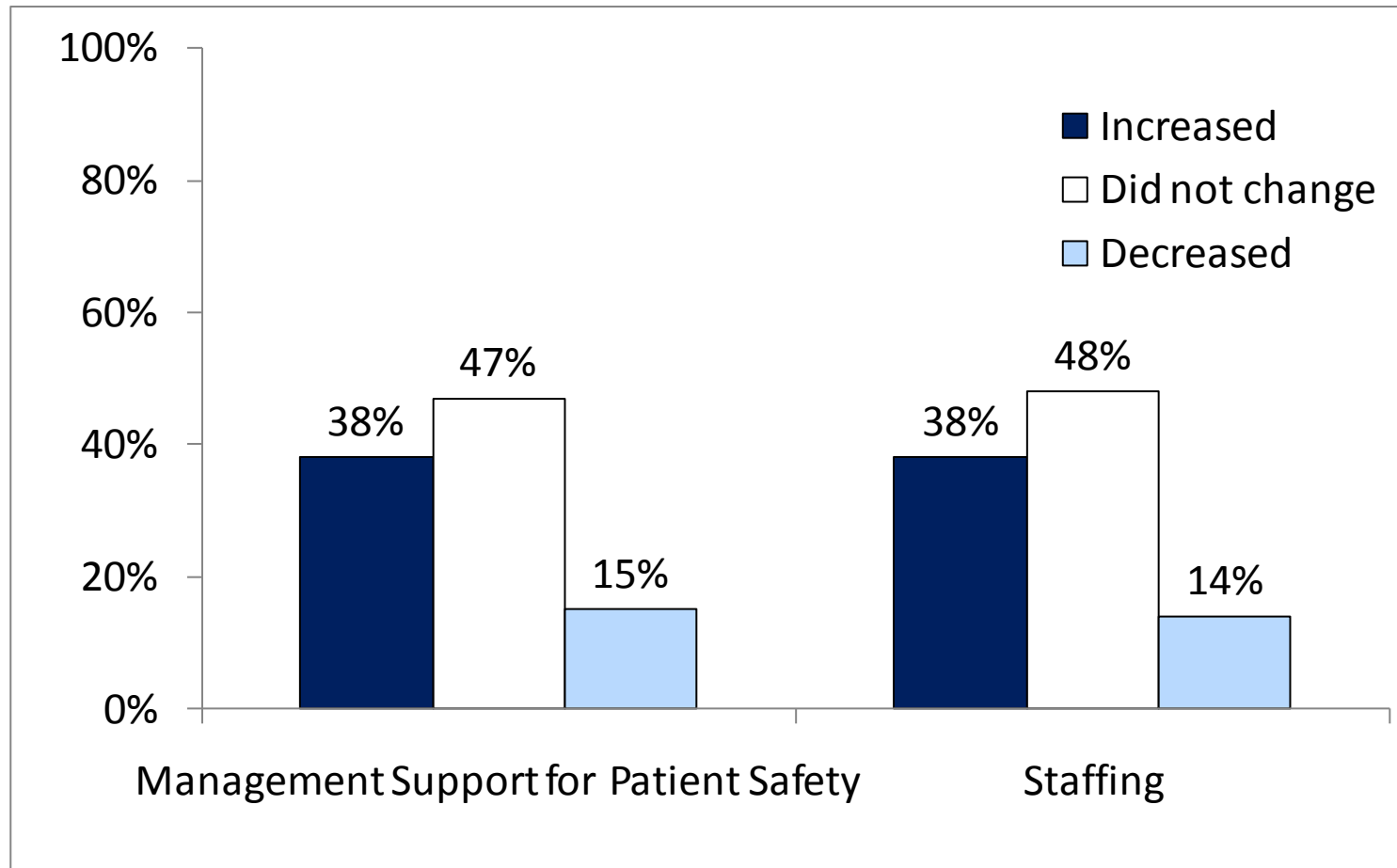


Composites – Average Decreases 4-6%

Items – Average Decreases 4-8%

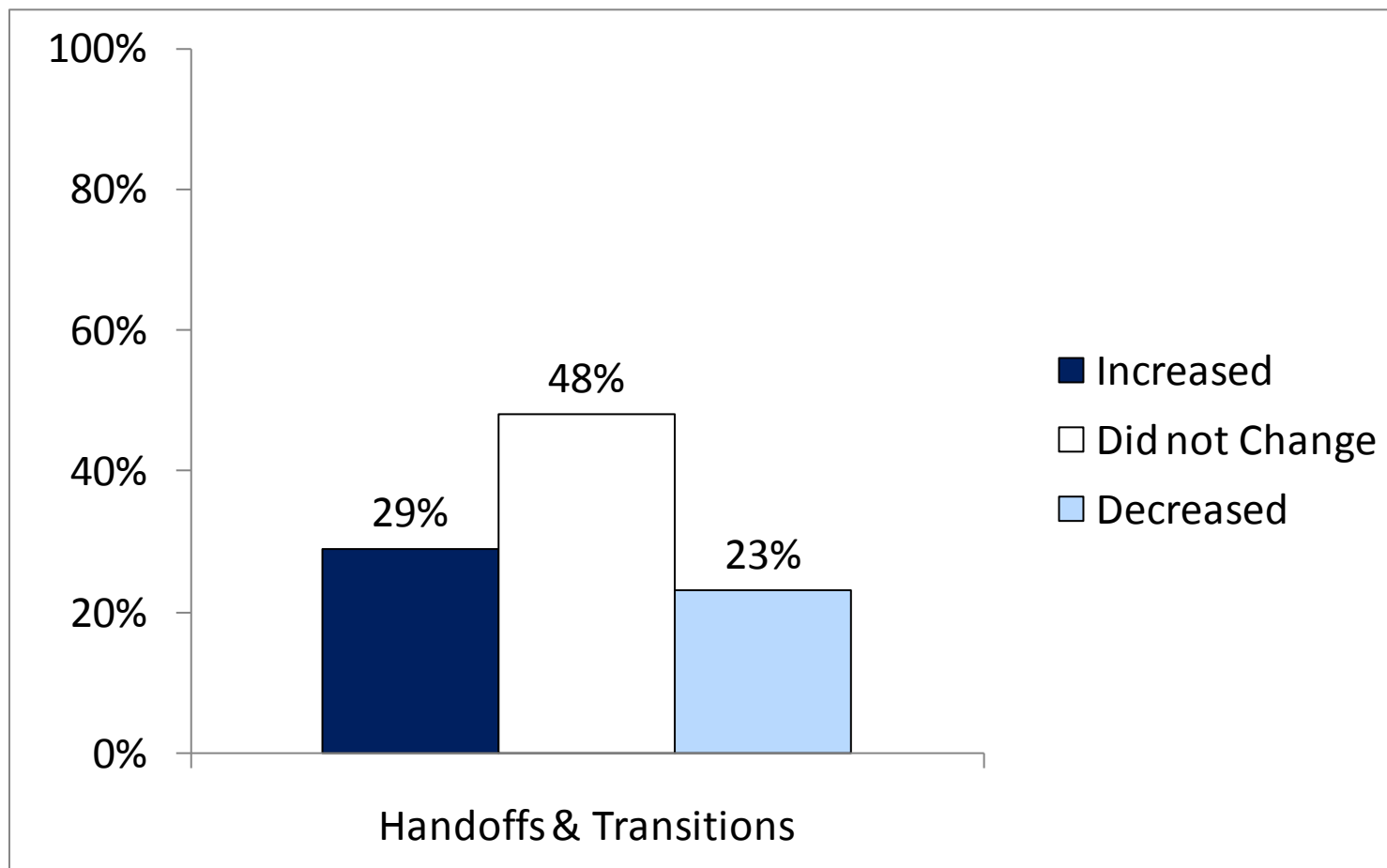
2010 Composites that Increased the Most

% of Trending Hospitals that Increased, Did not Change, or Decreased



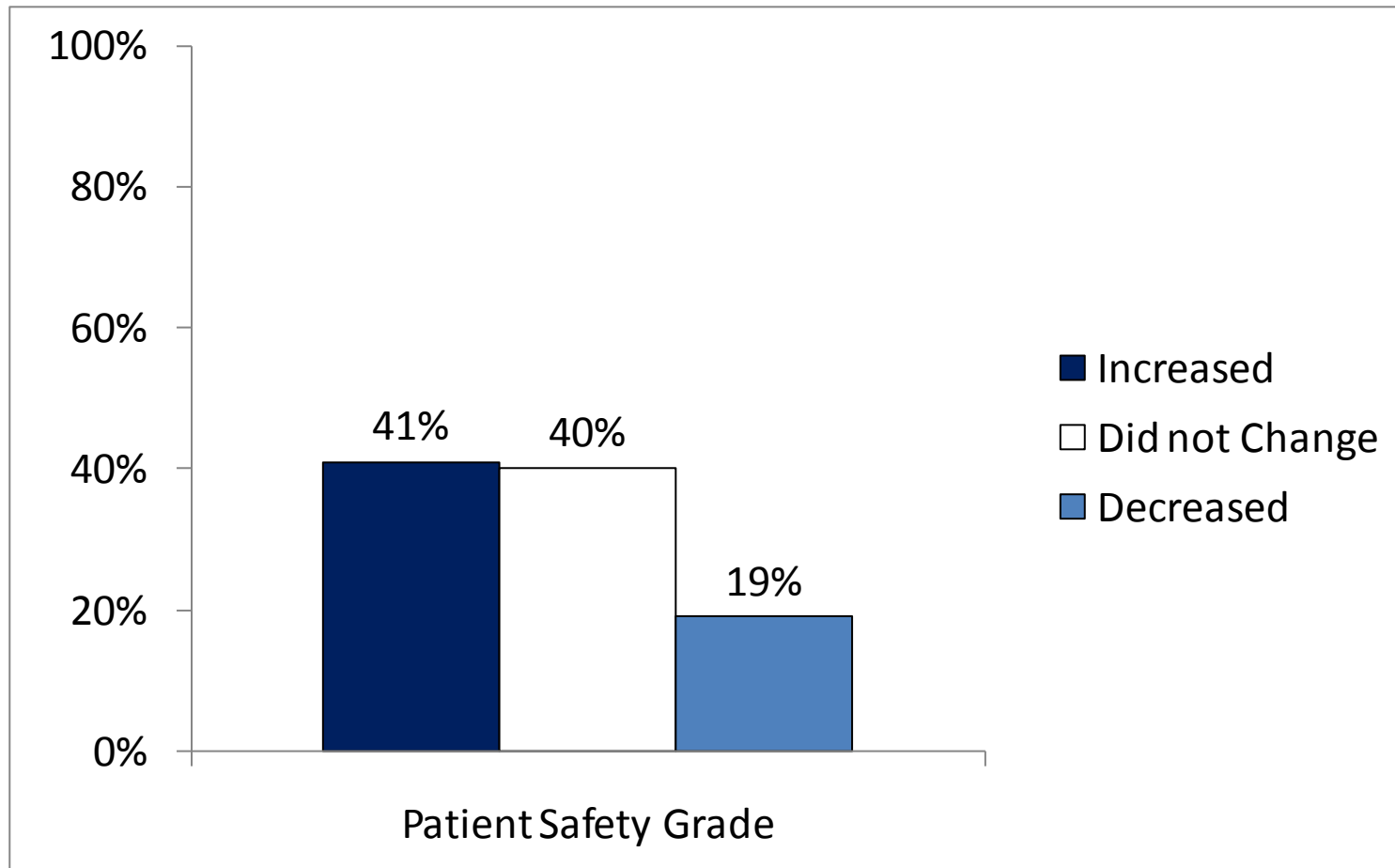
2010 Composite that Decreased the Most

% of Trending Hospitals that Increased, Did not Change, or Decreased



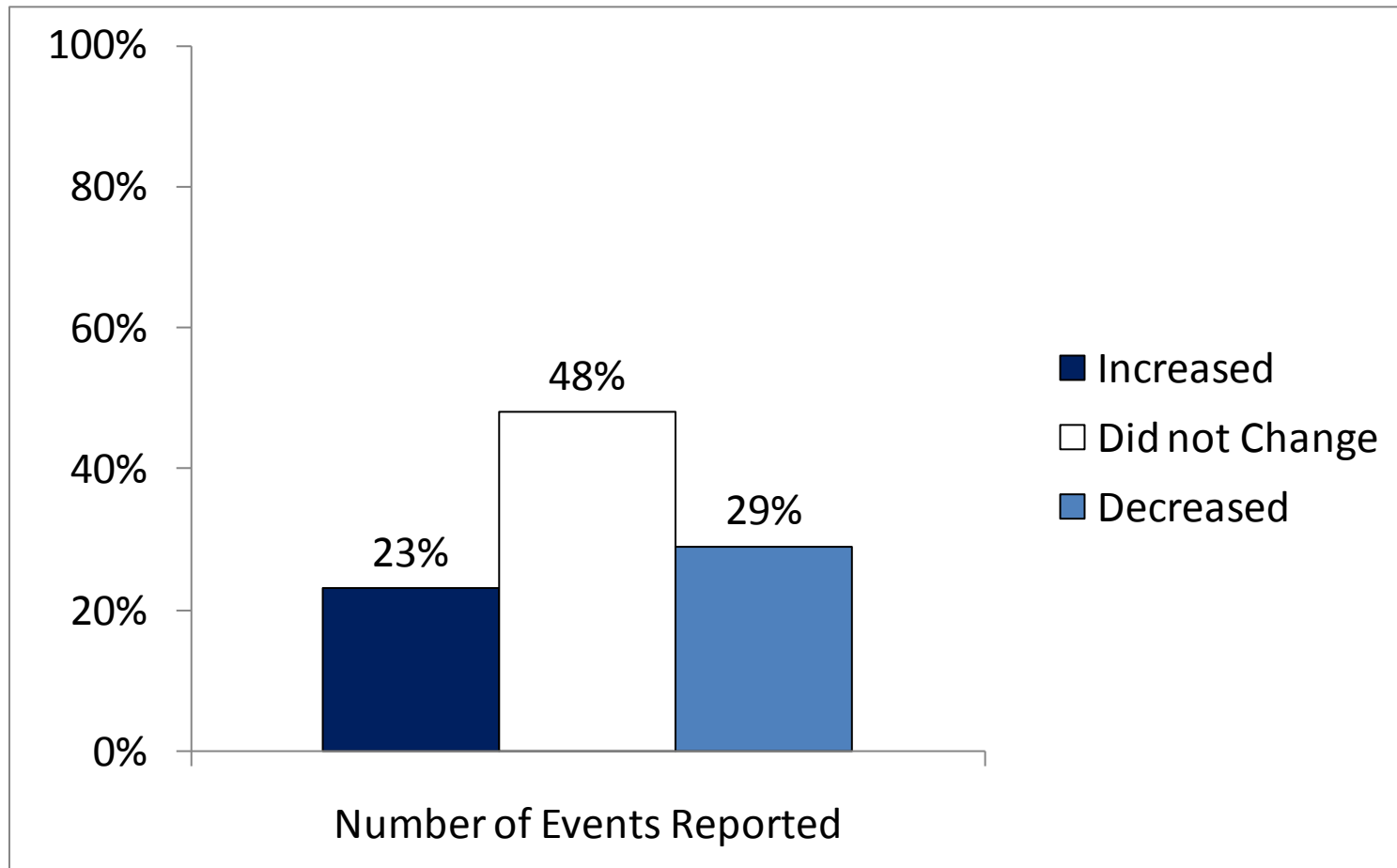
2010 Patient Safety Grade

Percentage of Hospitals That Increased, Did not Change, or Decreased on Patient Safety Grade



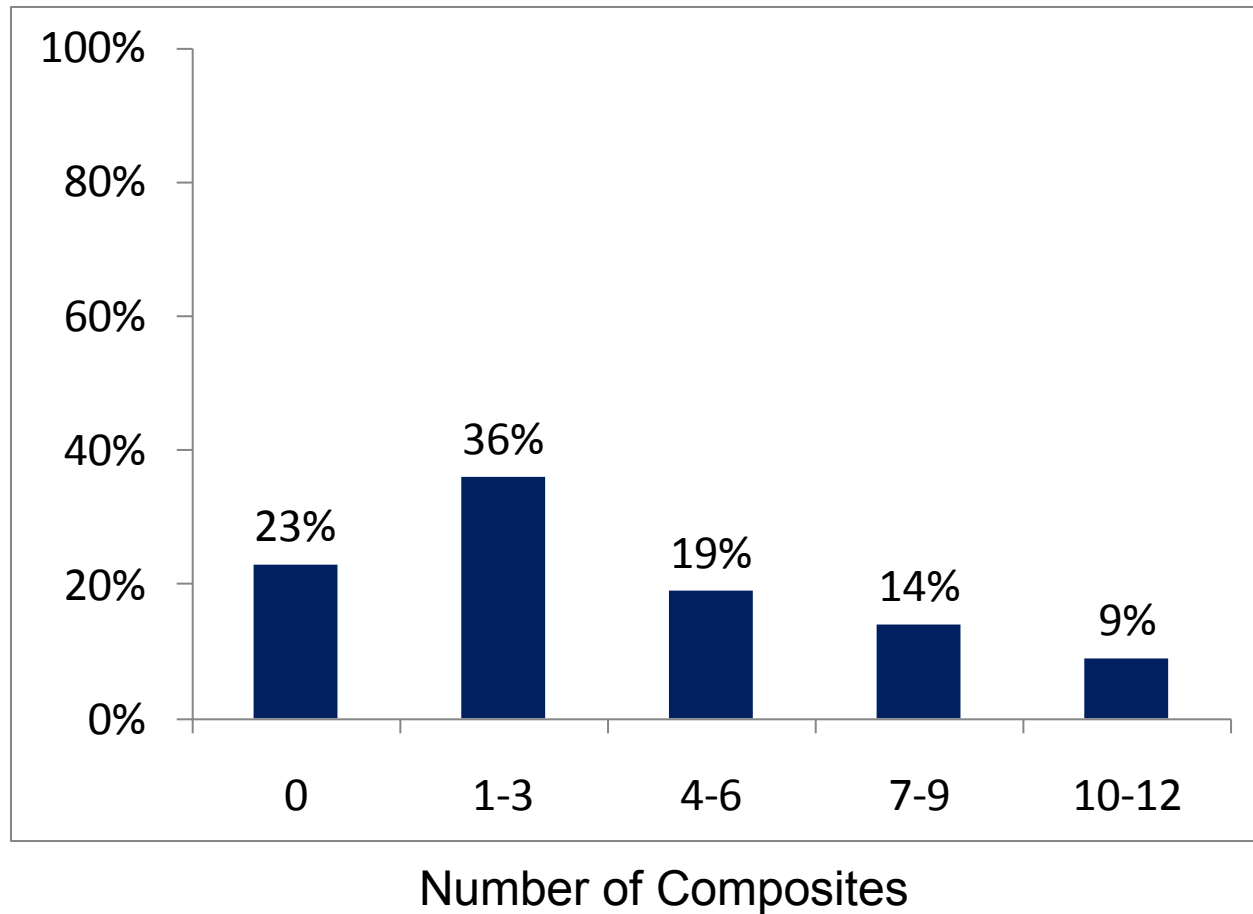
2010 Number of Events Reported

Percentage of Hospitals That Increased, Did not Change, or Decreased on Number of Events Reported in the Past 12 Months



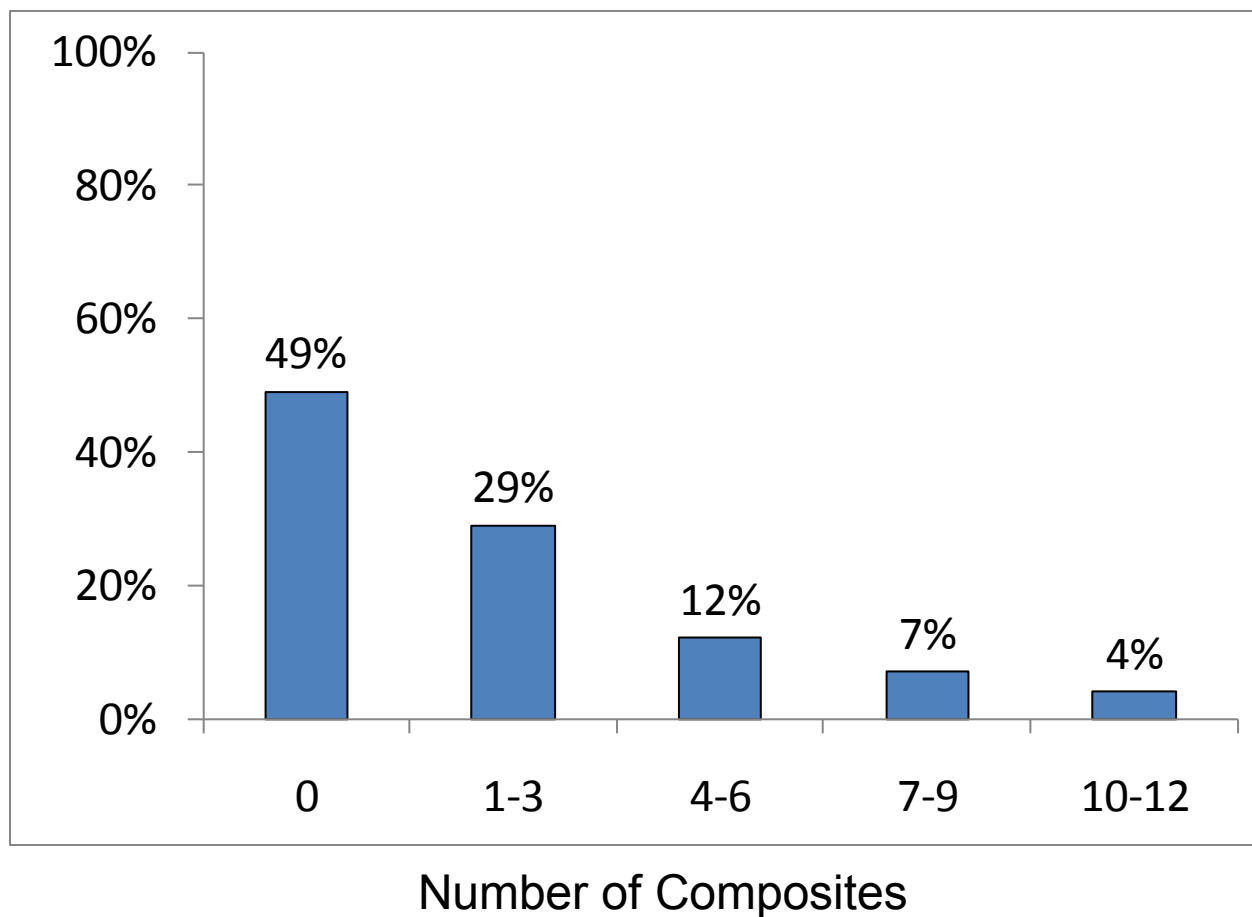
Increases in # of Composite Scores Over Time

Percentage of Hospitals That Increased by Number of Composites



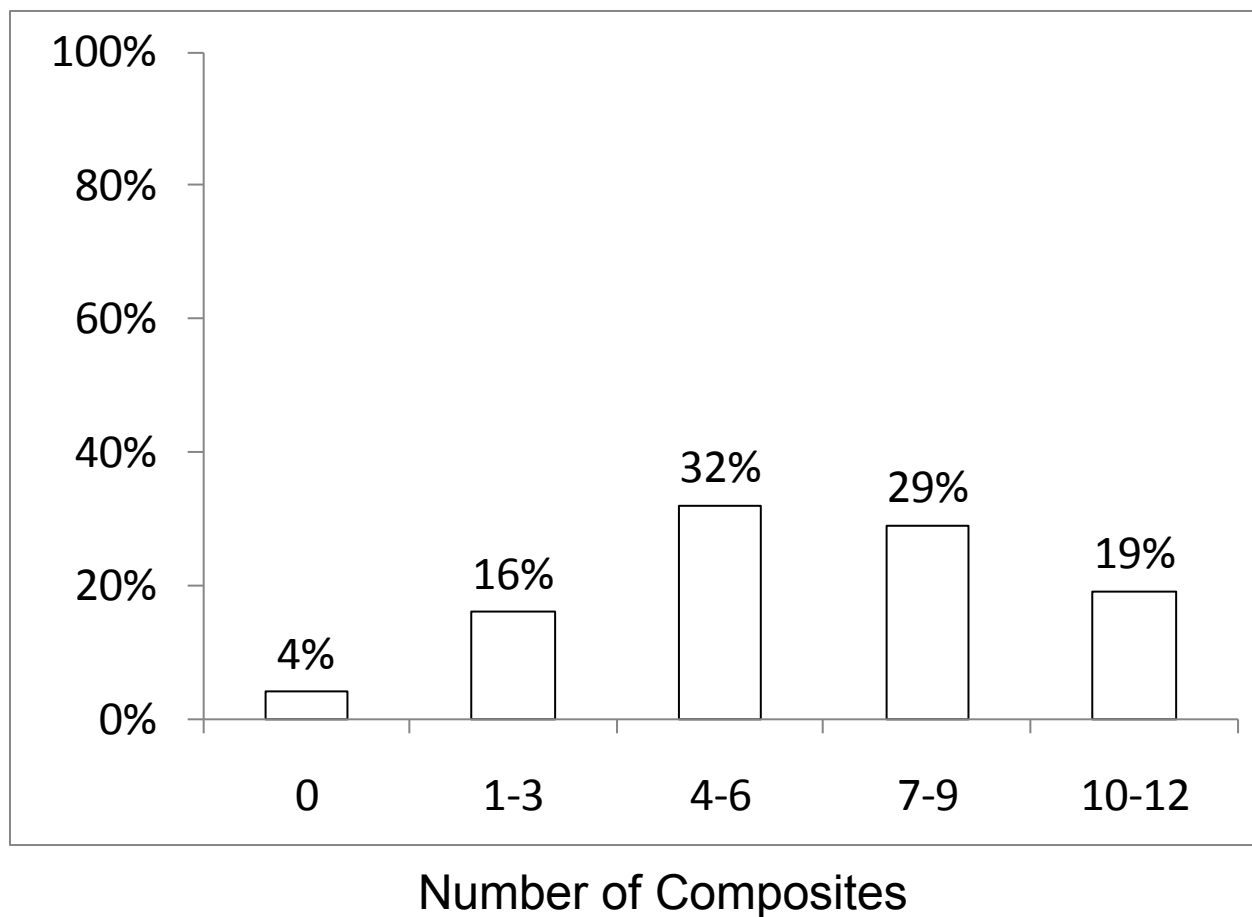
Decreases in # of Composite Scores Over Time

Percentage of Hospitals Decreased by Number of Composites



No Change in # of Composite Scores Over Time

Percentage of Hospitals Did Not Change by Number of Composites



Trending by Hospital Characteristics

- Large hospitals (400-499 beds) had the greatest increases over time on 7 of the 12 composites
- Small hospitals (6-24 beds) had the greatest increases on patient safety grades of “Excellent” or “Very Good”
- No noticeable changes over time by teaching status or ownership

Trending Results by Respondent Characteristics

Trending: Work Area/Unit

- *Obstetrics* had the greatest increase on 5 of the 12 patient safety culture composites
- *ICU, Pediatrics, and Pharmacy* had the greatest increases over time in average percentage of respondents giving their work area/unit a patient safety grade of “Excellent” or “Very Good”

Trending Results by Respondent Characteristics

Trending: Staff Position

- *Administration/Management* had the greatest increase in positive response over time on seven of the 12 patient safety culture composites
- *Therapists* had the largest increase over time in average percentage of respondents giving their work area/unit a patient safety grade of “Excellent” or “Very Good”

Patient Safety Improvement Initiatives

- 91% of the 321 trending hospitals provided information about patient safety actions taken between previous and most recent survey administrations
- 92% implemented more than initiative
- 94% shared results with hospital administrators, but only 72% shared results with hospital staff
- Most frequently used initiative was Situation Background-Assessment-Recommendation (SBAR) (65%)

Patient Safety Improvement Interview Themes

In 2008 interviewed 9 trending hospitals

- Improved communication between management and staff
- Improving error reporting systems, and applying nonpunitive “Just Culture” principles.
- Engaged staff in developing solutions to patient safety problems.
- Developed, implemented, and monitored action plans

Next Steps



- Potential three points in time



- More qualitative analysis
(Case studies/interviews)



- Suggestions or ideas for trending

Questions?



SafetyCultureSurveys@ahrq.hhs.gov